

R E M A R K S

Careful review and examination of the subject application are noted and appreciated. Applicants' representative thanks Examiner Rao for the indication of allowable subject matter.

SUPPORT FOR CLAIM AMENDMENTS

Support for the amendments to the claims can be found in the drawings as originally filed, for example, in FIGS. 2 and 3, and in the specification as originally filed, for example, on page 7, lines 1-10, and on page 7, line 1 through page 8, line 17, and on page 10, line 16 through page 11, line 10. As such, no new matter has been introduced.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

The rejection of claims 1, 3-14 and 16-24 under 35 U.S.C. §103(a) as being unpatentable over Au (U.S. Patent No. 6,646,578) in view of Yuan et al. (U.S. Patent No. 5,821,986; hereinafter Yuan) has been obviated, in part, by amendment, is respectfully traversed in part and should be withdrawn.

Subject matter similar to the allowable matter of claim 25 has been incorporated into claim 1. Subject matter similar to the allowable matter of claim 26 has been incorporated into claim 9. Subject matter similar to the allowable matter of claims 25 and 26 has been incorporated into claim 13. While the exact language

of claims 25 and 26 has not been copied into claims 1, 9 and 13, the language added to claims 1, 9 and 13 represents in generic form the syntax elements recited in claims 25 and 26. Specifically, claims 1, 9 and 13 have been amended to include parsing a first syntax element indicating an end of slice and a second syntax element representing the I_PCM mode macroblocks, where the first or second syntax element follows an entropy coding termination. Au and Yuan do not appear to teach or suggest parsing a first syntax element indicating an end of slice and a second syntax element representing I_PCM mode macroblocks, where the first or second syntax element follows an entropy coding termination, as presently claimed. As such, the presently claimed invention is believed to be fully patentable over the cited references and the rejection should be withdrawn.

With respect to claim 14, the presently claimed invention provides a method for encoding a video signal, comprising the steps of: (A) generating a first signal comprising non-PCM coded data and a second signal comprising PCM coded data by parsing the video signal, (B) generating a third signal by entropy encoding the first signal and (C) generating a bitstream by combining the second signal and the third signal within a common slice, where the common slice comprises pulse code modulation (PCM) coded data and non-PCM coded data. The combination of Au and Yuan does not teach or suggest all the limitations of the presently pending claim 14. As

such, the presently pending claim 14 is fully patentable over Au and Yuan and the rejection should be withdrawn.

Specifically, the Office Action states:

However, Au fails to disclose wherein said first and second signal correspond with non-I PCM and I PCM mode macroblocks, respectively, as in the claim (page 7, lines 2-4 of the Office Action).

The Office Action, in rejecting claim 14, relies on the embodiment of Yuan where two quantization methods can be used to quantize DC values: pulse code modulation (PCM) and differential pulse code modulation (DPCM) (see page 7, lines 4-11 of the Office Action citing column 11, lines 50-65 and column 19, lines 45-67 of Yuan). In this embodiment of Yuan DC values are quantized using either PCM or DPCM. In both modes, the quantized values are variable length coded. In particular, Yuan states:

In the illustrated embodiment, **two quantization methods can be used to quantize the DC values. One is pulse code modulation (PCM) and the other is differential pulse code modulation (DPCM)**, both of which are well known in the art. The purpose of using one of these two quantization modes is to obtain a higher compression gain. The PCM mode works better when the values are not highly correlated, while the DPCM method is more efficient during the buildup of a picture when the signals have a higher correlation. **In both modes, the quantized information is a [sic] variable length coded (VLC).** There is one bit for each macroblock to indicate whether DC information is present; and if it is present, there is a second bit which indicates which quantization method has been used (column 11, lines 52-65 of Yuan, emphasis added).

This does not appear to meet the language of the presently pending claim 14. Both quantization methods are a form of Pulse Code Modulation. Since Yuan states that in both modes, the quantized information is variable length coded (VLC), Yuan does not appear to meet the limitations of generating **a first signal comprising non-PCM coded data** a second signal comprising PCM coded data by parsing the video signal, **generating a third signal by entropy encoding the first signal**, and generating a bitstream by combining the second signal and the third signal within a common slice, where the common slice comprises pulse code modulation (PCM) coded data and non-PCM coded data, as presently claimed. FIG. 4 of Au also shows the bitstream generated through entropy coding (see block 49 and bitstream 15 in FIG. 4 of Au). Thus, Au combined with Yuan does not appear to teach or suggest generating a bitstream by combining a signal comprising non-PCM coded data and a signal comprising PCM coded data where the signal comprising the non-PCM coded data is entropy encoded, as presently claimed. As such, the presently claimed invention is fully patentable over the cited references and the rejection should be withdrawn.

Claims 3-8, 10-12 and 16-26 depend, directly or indirectly, from either claim 1, claim 9 or claim 14 which are believed to be allowable. As such, the presently claimed invention is fully patentable over the cited references and the rejection should be withdrawn.

New claims 27-32 depend, directly or indirectly, from either claim 1, claim 9 or claim 14 which are believed to be allowable. As such, the presently claimed invention is fully patentable over the cited references.

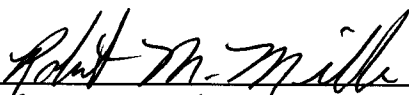
Accordingly, the present application is in condition for allowance. Early and favorable action by the Examiner is respectfully solicited.

The Examiner is respectfully invited to call the Applicants' representative between 9 a.m. and 5 p.m. ET at 586-498-0670 should it be deemed beneficial to further advance prosecution of the application.

If any additional fees are due, please charge Deposit Account No. 12-2252.

Respectfully submitted,

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c/o Lloyd Sadler
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